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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,156

06/08/2006

Alan J. Stern

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8841

29089

7590

12/16/2008

HUNTSMAN PETROCHEMICAL CORPORATION  
LEGAL DEPARTMENT  
10003 WOODLOCH FOREST DRIVE  
THE WOODLANDS, TX 77380

EXAMINER

KLINKEL, KORTNEY L

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/582,156	<b>Applicant(s)</b> STERN ET AL.	
	<b>Examiner</b> Kortney L. Klinkel	<b>Art Unit</b> 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 8-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/8/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claims***

Claims 1-16 are pending in the instant Office action.

### ***Election/Restriction***

Applicant's election with traverse of Group I, claims 1-7 in the reply filed on 9/26/2008 is acknowledged. The traversal is on the ground(s) that the reference Ferrell et al. (US 5750130) does not teach all the elements of Applicants' claimed invention and teaches against the present invention and that the examination of all claims presented does not impose an undue burden of examination on the Examiner. These arguments are not found persuasive because the Ferrell reference used to break unity teaches the special technical feature of the instant claim. The common technical feature linking all the claims is the combination of a cellulosic granular carrier, at least one agriculturally active ingredient and at least one surfactant (i.e. the composition of claim 1). As explained in the Restriction/Election requirement dated 8/26/2008 at pages 2-3, and restated infra, this element cannot be a special technical feature under PCT Rule 13.2 because the element is shown in the prior art.

In the present case, Ferrell (US 5750130, as per Applicant's IDS) teaches a composition having a cellulosic granular carrier (paper pulp), at least one agriculturally active ingredient (a pesticide or herbicide), and at least one surfactant (see Example 5, also claim 1). As a result, no special technical features exist among the different groups because the inventions in Groups I-III fail to make a contribution over the prior art. In

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conclusion, Groups I-III are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept, and therefore, restriction for examination purposes as indicated is proper. Because Ferrell teaches the common technical feature of the instant application, it cannot teach against the present invention **as claimed**.

Furthermore, the establishment of burden on the Office applies to US cases only. The instant application is a national stage entry of an international application under 35 U.S.C. 371. As a result, lack of unity practice is observed for restriction purposes.

The requirement is still deemed proper and is therefore made FINAL.

Claims 8-16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected subject matter, there being no allowable generic or linking claim. Election was made with traverse in the reply filed on 9/26/2008.

### ***Information Disclosure Statement***

Acknowledgement is made of applicant's submitting an information disclosure statement on June 8, 2006. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

### ***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is

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requested in correcting any errors of which applicant may become aware in the specification.

The use of a large number of trademarks has been noted in this application. Trademarks should be capitalized wherever they appear and be accompanied by their generic terminology. For example, the use of the trademark BIODAC® appears multiple times throughout the specification. However, there is never any mention of what it consists of other than it is a granular composition. No mention is made of what the granules are.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks. For further information, please refer to MPEP 608.01(v).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, and 5-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Vrabel et al. (US 6004904, as per applicants' IDS) as evidenced by the MSDS for Rhodafac RE 610 (Ashland, updated 1/26/1998) and the MSDS for Igepal CA-630 (revised 4/2/2003).

Vrabel teaches a pesticidal granule which comprises 0.38% pesticide, 1% Igepal CA 630 surfactant, 1.0% Rhodafac RE610, 7.0% N-methylpyrrolidine solvent (an agricultural adjuvant), and 90.62% Biodac 20/40 granules (Example 2, column 7). Biodac is a cellulosic granular carrier. Rhodafac RE610 is a nonylphenol polyethoxyate phosphate ester surfactant and Igepal CA 630 is an ethoxylated octylphenol surfactant, both of which are liquids at room temperature (Igepal CA-630 MSDS page 2 and Rhodafac RE610 MSDS page 5).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vrabel et al. (US 6004904, as per applicants' IDS) as evidenced by the MSDS for Rhodafac RE 610 (Ashland, updated 1/26/1998) and the MSDS for Igepal CA-630 (revised 4/2/2003) in further view of Turnbull (US 5705516).

Vrabel teaches a pesticidal granule which comprises 0.38% pesticide, 1% Igepal CA 630 surfactant, 1.0% Rhodafac RE610, 7.0% N-methylpyrrolidine solvent (an agricultural adjuvant), and 90.62% Biodac 20/40 granules (Example 2, column 7). Biodac is a cellulosic granular carrier. Rhodafac RE610 is a nonylphenol polyethoxyate phosphate ester surfactant and Igepal CA 630 is an ethoxylated octylphenol surfactant, both of which are liquids at room temperature (Igepal CA-630 MSDS page 2 and Rhodafac RE610 MSDS page 5).

Vrabel also teaches that the pesticidal granule can comprise an insecticide (col. 4, line 49).

Vrabel fails to teach a specific embodiment comprising an insecticide and therefore also fails to teach that the insecticide is a pyrethroid, more specifically pyrethrin and bifenthrin. The examples of Vrabel comprise an oxazole fungicide, see example 1 among others.

Turnbull teaches oxazoles and their use in agricultural compositions. Turnbull also teaches that bifenthrin, pyrethrin and permethrin are all pyrethroid insecticides (col 112, lines 62-67). Accordingly it would have been obvious to one of ordinary skill in the art at the time of the instant invention to combine the teachings of Vrabel and Turnbull to arrive at the instant claimed invention with a reasonable expectation for success. One would be motivated to do so because Vrabel teaches that insecticides can be used in the pesticide granules and Turnbull teaches that bifenthrin, pyrethrin and permethrin are all pyrethroid insecticides. Furthermore, both Vrabel and Turnbull teach the combination of oxazole pesticides with insecticides.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrell et al. (US 5750130, as per applicants' IDS) as evidenced by the Brij® 72 MSDS (Sigma-Aldrich, updated 10/2/2007).

With respect to instant claim 1 which requires a composition comprising 85-97% by weight of a cellulosic granular carrier, 0.01-10% by weight of at least one agriculturally active ingredient and 1-15% by weight of at least one surfactant, Ferrell teaches a composition having a cellulosic granular carrier (paper pulp), at least one agriculturally active ingredient (a pesticide or herbicide), and at least one surfactant (see Example 5, also claim 1). In claim 1 Ferrell teaches that the pesticidal product is present in about 0.05 to 7% by weight of the total composition and that the weight ratio of the pesticidal compound to the carrier is from about 40 to 60 to about 70 to 30. The carrier portion of the composition is the portion which may contain the surfactant (col. 4,



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line 15 also claim 5). Example 5 provides an example with 0.5 to 2.5% of the fungicide Iprodione on paper pulp granules and an example with 1.0-3.4% of the insecticide diazionon on peanut hull granules.

With respect to claim 2 which recites that the agriculturally active ingredient is an insecticide, Ferrell teaches several possible insecticides for use in the composition, see column 2, line 14-column 3, line 5.

With respect to claim 3 which recites that the insecticide is a pyrethroid, Ferrell teaches Permethrin, a pyrethroid insecticide (col. 2, line 58).

With respect to surfactants, Ferrell teaches that surfactants can be used to modify the rate at which the pesticide is released by modifying the hydrophilicity of the carrier materials (col. 4, lines 15-18). Examples of surfactants taught by Ferrell include tallow amine condensed with 2 moles of ethylene oxide per mole of amine as well as C<sub>18-26</sub>alcohols condensed with from about 2 to about 10 moles of ethylene oxide per mole of alcohol (col. 4 lines 35-37). These are the same types of surfactants required by instant claim 6. Stearyl alcohol ethylene oxide (2), chemical formula C<sub>18</sub>H<sub>37</sub>(OCH<sub>2</sub>CH<sub>2</sub>)<sub>2</sub>OH, also known as Brij® 72 is one of the surfactants taught by Ferrell. It has a melting point between 44 and 45 °C (see page 3, of the Brij® 72 MSDS). This meets the limitations of instant claim 5.

With respect to claim 7 which recites that the composition further comprises at least one agricultural adjuvant, Ferrell teaches the presence of a wax, among other adjuvants (examples 1-5).

The teachings of Ferrell differ from the instant application in that Ferrell does not specifically, but rather generically teaches the invention of the instant application from a finite number of possibilities. Ferrell fails to disclose specifically a range from 1 to 15% by weight of at least one surfactant. However, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to arrive at the claimed pesticidal composition with a reasonable expectation for success based on the teachings of Ferrell. One would have been motivated to do so because Ferrell teaches that the use of surfactants allows one to modify the release rate of the pesticide to the environment by modifying the hydrophilicity of the carrier. The ordinarily skilled artisan would be motivated to adjust the relative amounts of the ingredients in order to arrive at a composition with the desired physical properties, such as release rate of active ingredient, in order to arrive at a composition with maximum pesticidal activity.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ferrell et al. (US 5750130, as per applicants' IDS) as evidenced by the Brij® 72 MSDS (Sigma-Aldrich, updated 10/2/2007) in further view of Turnbull et al. (US 5705516).

The teachings of Ferrell et al. as evidenced by the Brij® 72 MSDS are set forth above.

Ferrell fails to teach the pyrethroid insecticides pyrethrin and bifenthrin as necessitated by instant claim 4. Ferrell, however, does teach the use of the pyrethroid insecticide permethrin as well as the insecticide diazinon (example 5).

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Turnbull teaches that bifenthrin, pyrethrin and permethrin are all pyrethroid insecticides (col 112, lines 62-67). Turnbull also teaches that diazinon is an insecticide (col 113, line 11). Bifenthrin, pyrethrin and permethrin are all pyrethroid insecticides. Bifenthrin, pyrethrin, permethrin and diazinon are all well known insecticides. It is prima facie obvious to substituted one known equivalent for another. Accordingly it would have been obvious to one of ordinary skill in the art at the time of the instant invention to substitute bifenthrin or pyrethrin for either permethrin or diazinon, with a reasonable expectation for success as all four compounds are insecticides.

Applicants' data in the specification has been considered. Applicant provides 16 granular pesticide compositions (1-16, pp. 16-17) which all contain BIODAC® 12/20 granules and varying amounts of trademarked solvents and surfactants and the insecticide bifenthrin. Applicant also provides 17 granular pesticide compositions (17-33, p. 19) which all contain BIODAC® 12/20 granules and varying amounts of trademarked solvents and surfactants and the insecticide permethrin. Compositions 17-33 were studied in an ant bioassay. No data exists for compositions 1-16. There are no results present for the two specifically claimed insecticides pyrethrin and bifenthrin (claim 4) in the specification.

### ***Conclusion***

Claims 1-7 are rejected. No claim is allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kortney Klinkel whose telephone number is (571)270-5239. The examiner can normally be reached on Monday-Friday 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached at (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KLK

/Sharmila Gollamudi Landau/  
Supervisory Patent Examiner, Art Unit 1611